

**IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/526,848
Applicant(s): Ling Wang
Filed: September 29, 2005
TC/A.U.: 2600/2618
Examiner: Tan H. Trinh
Atty. Docket: US 020306 US
Confirmation No.: 9363
Title: MASTER-SLAVE ORIENTED TWO-WAY
RF WIRELESS LIGHTING CONTROL SYSTEM

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
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Sir:

In response to the Examiner's Answer mailed on **February 17, 2010**, Applicants provide herewith a timely filed Reply Brief.

1. Rejections under 35 U.S.C. § 103

1. Claims 1-7 and 9-17 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious in view of *Josephsoon, et al.* (U.S. Patent Application Publication 20080034331) in view of *Haupt* (U.S. Patent Application Publication 20020042282);

2. Claims 8 and 18 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Josephsoon, et al.*, *Haupt*, and *Crookham, et al.* (U.S. Patent Application Publication 0034331).

Applicants have presented in their Appeal Brief a traversal of the rejections set forth above. The present Reply Brief supplements their position, and addresses the Response to Arguments set forth in the Examiner's Answer, beginning on page 8 thereof.

I. Reply to the Examiner's Answer

A. Claims 1

Claim 1 recites:

A lighting control network, comprising:

a remote control unit having a RF signal transmitter and a RF signal receiver;

and

a plurality of lighting control units, each of said lighting control units having a RF signal transmitter, a RF signal receiver, and a lighting unit associated therewith, wherein said remote control unit and said plurality of lighting control units are configured in a master-slave oriented network, one of said plurality of lighting control units and said remote control unit being configured as a master in said network and remaining lighting control units of said plurality of lighting units and said remote control unit being configured as slaves in said network, and said plurality of lighting control units and said remote control unit communicating bi-directionally with each other via a RF wireless link.

At page 3, the Examiner's Amendment directs Applicants to the remote unit 220 for the alleged disclosure of the remote control unit of claim 1. The Examiner's Answer then directs Applicants to the multi-device switches (MDSs) 202 and the control unit 252 for the alleged disclosure of the plurality of lighting control units. At page 4, the

Examiner's Answer asserts:

"...the remote control unit (220) and the plurality of lighting control units (202s and 252) are configured in a master-slave oriented network (fig. 2B), one of the plurality of control units (252 is master for 202's) and the central control unit (220) being configured as a master in the network (250)(see fig. 2B master is the control (252)); and the remaining control units (202s) of the plurality of lighting control units (220s) being configured as slaves in the network (see fig. 2b, page 11, section [0111] lines 3-12)."

Thus, the Examiner's Answer relies upon the remote unit 220 for the alleged feature of the remote control unit of claim 1; and MDSs 202 and the control unit 252 for the alleged disclosure of the plurality of lighting control units. The Office Action asserts that the remote unit 220 (referred to as the remote control unit in the Examiner's Answer), and the MDSs 202 and central control unit 252 of *Josephsoon, et al.* are in a master-slave oriented network, presumably with the remote unit 220 functioning as the master control unit and units 202 and 252 as the slave units. As such, it seems that the Examiner's Answer deems control unit 252 deemed the master of the MDSs 202, and yet in the same sentence, the remote control unit 220 is seemingly relied upon for the alleged teaching of the master unit. Applicants respectfully submit that this line of reasoning is flawed: in a master-slave oriented network, there can be **only one master**.

Furthermore, the Office Action directs Applicants to paragraph [0111] of *Josephsoon, et al.* for the alleged disclosure of the master-slave relationship as specifically recited in claim 1. Applicants respectfully submit that the function of the interface 256 is described, and the user is therethrough enabled to scroll through MDSs 202, there is no disclosure of a master-slave configuration set forth in paragraph [0111]. To this end, paragraph [0111] of *Josephsoon, et al.* recites:

"[0111] Referring now to FIG. 2B, another preferred embodiment of an electrical device control system of this invention, generally 250, is shown to include a central control unit 252 having a housing 254 including an user interface 256 and a processing and control unit 258. The central control unit 252 is connected, via electric wires 260 to a plurality of MDSs 202. One of ordinary skill in the art should recognize that wires 260 can be replaced by any other type of wired communication such as optical fiber, coaxial cable, twisted pairs, shielded twisted pairs or the like or any type of wireless

communication such as RF, ultrasound, laser, maser, IR, near IR, microwave, or the like. Motion of a body part of a human or animal (not shown) on, about, over and/or near a surface 262 of the interface 256 in a first direction 264 allows the user to scroll through the MDSs 202. Motion of the body part on, about, over and/or near the surface 262 in a second direction 266 allows the user to a scroll through the available electrical devices 210 controlled by the selected switch, which is selected by a scroll position when the body part moves in the second direction 266. Motion for a second time in the first direction 264 allows the user to change a value of an attribute of a selected electrical device, which is selected by a scroll position when the body part stops moving in the second direction 266 and starts moving, for a second time, in the first direction 264. Whether the value of the attribute is increase or decreased depends on whether the body part moves to the right or to the left. Moving to the right, the positive x direction, increases the value of the attribute, while moving to the lift, the negative x direction, decreases the value of the attribute.”

So, while the central control unit 252 is connected to MDSs 202, there is no disclosure of a master-slave configuration as specifically recited in claim 1 disclosed in this portion of *Josephsoon, et al.* Applicants further note that a keyword search of *Josephsoon, et al.* reveals the word ‘master’ used in connection with a clock function; and fails to reveal the disclosure of the word ‘slave.’ Applicants again, therefore, respectfully submit that *Josephsoon, et al.* is deficient in at least the disclosure of the master-slave configuration as specifically featured in claim 1. Similarly, *Josephsoon, et al.* is lacking the disclosure of at least one feature of claim 11.

II. Reply to the Response to Applicants’ Arguments

Beginning at page 8, the Examiner’s Answer presents a Response to Applicants’ Arguments. Applicants have reviewed the Response and present the following rebuttal.

First, and in response to Applicants’ position that *Josephsoon, et al.* is lacking the disclosure of ‘a remote control unit’ 1, the Examiner’s Answer asserts:

The examiner, However, does not agree. Since Josephsoon teaches A lighting control network (fig. 2B), comprising: a remote control unit (220) having a RF signal transmitter and a RF signal receiver (see fig. 2B, remote control unit (220) is communication with MDS (202s) (lighting control units) via a wireless communication pathway or with two way link (260 or 234), and a plurality of lighting control units (MDSs 202s) with wireless RF connection (260) (fig. 2B on page 11, par [0111] and [0113-0114]), and Josephsoon also teaches the control unit 252 is light control units having a housing 254 including an user interface 256 and a processing and control unit 258, that control unit 252 is connected, via electric wires 260 or wireless communication such as RF, IR, Microwave, to control a plurality of MDSs 202 (light control units). Since the control unit 252 is remotely and wireless remote control to control a plurality of MDSs 202 (light control units) and lighting control units (252) with interface is indirect associated with lighting unit (202s) or backlight (see fig. 2B and page 11, paragraph [0111] and page 8, par [0094])

Applicants initially direct attention to page 6 of their Appeal Brief, which specifically rebuts the assertion set forth in the Office Action that central control unit 252 is a remote control unit as specifically recited in claim 1. Here, the Examiner's Answer directs Applicants to remote control unit 220 and not the central control unit 252 for the alleged disclosure of the remote control unit.

Applicants submit that remote control unit 220 of *Josephsoon, et al.* provides access to the interface 256 of the central control unit 252 by motion of a human or animal in proximity to the surface 228 of the interface. Thus, rather than effecting control of a lighting control unit, the remote control unit 220 of *Josephsoon, et al.* presents a remote **interface** for the central unit 252. (Applicants direct attention, for example, to paragraph [0113] of *Josephsoon, et al.* for support for this position.)

Second, in response to Applicants' position that the remote unit 220 of *Josephsoon, et al.* is not in communication with the MDSs 202, but rather is in communication with the central control unit 252, the Examiner asserts that the "...remote control unit 220 could send its commands to a central computer which would then route

the commands to an appropriate MDSs 202 (light control unit) (page 11, par [0113] and par [0114] lines 11-13). In this case, the remote control unit 220 is route the commands to an appropriate MDSs 202 (light control units). Therefore, remote 220 does indeed communicate with light control units (202s and 252), either directly (to 252) or indirectly (routing 202s through 252).” (See page 9 of the Examiner’s Answer.)

Again, Applicants respectfully submit that the remote unit 220 merely presents a remote interface to the central control unit 252, and is not in communication with the MDSs 202. (See paragraph [0113] of *Josephsoon, et al.*) Stated somewhat differently, the *plurality of lighting control units and the remote control unit **are not** communicating bi-directionally with each other via a RF wireless link*; but rather, the remote control unit 220 provides an interface with the central control unit 252.

Third, in response to Applicants’ position that the master-slave relationship of claim 1 is not disclosed in *Josephsoon, et al.* the Examiner’s Answer asserts:

“...And one of the plurality of lighting control units (252) and the remote control unit (220) being configured as a master in said network (fig. 2B) and remaining lighting control units being configured as slaves in said network (2B), and said plurality of lighting control units (202s and 252) and the remote control unit (220) communicating bi-directionally with each other via a RF wireless link (fig. 2B, page 11, par [0113] lines 16-19 and 0114). In this case the remote control unit (220) is direct/indirect or routing communicating bi-directionally with each other via a wireless RF link.” (See page 10 of the Examiner’s Answer.)

At the outset, Applicants respectfully submit that rather than aid in clarification of the Examiner’s position, the referenced portion lends confusion to the prosecution history. Notably, at page 4, the Examiner’s Answer concedes that “...Josephsoon does not mention the plurality of lighting control units (202s) communicating bi-directionally with each other via a RF wireless link.” The Examiner’s Answer then directs Applicants to *Haupt* in an attempt to cure the conceded deficiency of *Josephsoon, et al.* Clarification is, therefore, respectfully request on which position the Examiner intends to maintain in the rejection of claims 1 and 11.

Applicants respectfully submit that there is no disclosure in *Josephsoon, et al.* of a bi-directional link as specifically recited in claim 1. Notably, even assuming *arguendo* but not conceding that remote unit 220 suffices for the disclosure of a remote control unit as specifically recited in claim 1, and that MDSs 202 or central control unit 252 were lighting control units, there is no disclosure of their communicating **bi-directionally** with each other via a RF wireless link.

Moreover, a thorough review of paragraphs [0113] and [0114] of *Josephsoon, et al.* also fails to disclose that the one of the MDSs 202 or central control unit 252 are configured as a master in the network and the remaining MDSs 202 or central control unit 252 and the remote unit 220 are configured as slaves in said network.

Conclusion

In view the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance.

If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:
Phillips Electronics North America Corp.

/William S. Francos/

by: William S. Francos (Reg. No. 38,456)

Date: April 15, 2010

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